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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Michael Kaus

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

FUJITA, KATRINA R

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

02/04/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Amendment

1. For purposes of appeal, the proposed amendment(s) will be entered and the proposed rejection(s) detailed below will be included in the Examiner's Answer. To be complete, such rejection(s) must be addressed in any brief on appeal.

Upon entry of the amendment(s) for purposes of appeal:

Claim(s) 2-4, 8-12, 14-16, 18 and 21-25 would be rejected for the reasons set forth in the rejection under 35 U.S.C. § 103(a) based upon Wu, Weese et al. and Holten-Lund et al. of the final Office action mailed November 23, 2010.

Claim(s) 13 and 17 would be rejected for the reasons set forth in the rejection under 35 U.S.C. § 103(a) based upon Wu, Weese et al., Holten-Lund et al. and Pelletier et al. of the final Office action mailed November 23, 2010.

Response to Arguments

Summary of Remarks (@ response pages labeled 10-11): "The elastic deformation of Weese, if applied to the geon being configured in Figure 4.9(b) of Wu, would distort the initial geon model into a non-geon shape. Moreover, the balancing of

the internal and external energy would violate Wu's clear teaching that the frustration of choosing a crucial stopping condition is avoided."

Examiner's Response: In Wu, the geons are fitted to the object of interest, creating an extended deformable surface model for each part, such as that displayed in Figure 6.25. As these surface models are vague indications of the object's shape, a clearer segmentation can be obtained by utilizing the adaptation as taught by Weese et al., outlined in the rejections in the previous Office Action. Motivation for the combination of the Wu and Weese et al. references was gleaned directly from the disclosure of Weese et al. as cited. Furthermore, the Weese et al. reference would not add a "crucial stopping condition" as asserted by the Applicant. The Wu reference utilizes a Very Fast Simulated Re-annealing (VSFR) for the geon fitting, which is analogous to Weese et al.'s monitoring of internal and external object energies as VSFR monitors the object's "temperature", which one of ordinary skill in the art will appreciate is directly related to the object's energy.

Summary of Remarks (@ response page labeled 11): "First, due to the poor image quality of Holten-Lund, it is unclear what is measured in Figure 9. Perhaps, if the Examiner's copy of this reference is more legible, e.g., if there are demarcations on the pictures which illustrate what angle, dist 1, and dist 2 are referring to. If these numbers are indeed measurements of a joint structure, it is not clear where in Wu or Weese there is any teaching that such measurement is wanted or desirable. The Examiner indicates

that Holten-Lund cuts away portions of the bone, but is unclear what claim calls for such cutting away, or where either Wu or Weese teach that such cutting away would be advantageous."

Examiner's Response: As noted earlier in the Holten-Lund reference, a crucial measurement of the joint's deformation is accomplished by measuring angles on the slices. In this particular 3D application, Holten-Lund shows measurement of such an angle in Figure 9. As this is particularly suited for a medical application, it is advantageous to include such an ability for the study of medical images. The Examiner would also like to point out that Weese et al. further discloses applications in the medical field, particularly one that includes study of the femur. Lastly, the inclusion of the "cutting away" of Holten-Lund is to demonstrate the ability to adapt the extended deformable surface model, i.e. iso-surface, not to further limit the meaning and understanding of the claim language already addressed by the previous references.

Summary of Remarks (@ response page labeled 11): "Thus Wu teaches that the geons or geometric primitives should be individually fit to the object and then combined. This teaches away from the recitation in claim 8 of generating the extended deformable surface model first and then adapting the extended deformable surface model to the surface of bone."

Examiner's Response: As the Examiner has pointed out previously, the extended deformable surface model is met by the fitted geon of Wu. The adapted extended deformable surface model is further taught by Weese et al. Applicant's assertion that the primary reference, Wu, teaches away from the claim language is misleading, as the combination of the references does not teach away from the claim language.

Summary of Remarks (@ response page labeled 12): The Examiner has not cited any motivation, suggestion or teaching for Holten-Lund regarding the language of claim 15.

Examiner's Response: Prior to Applicant's amendment, claim 15 depended from claim 1, which was addressed with a proper combination and motivation. As claim 15 previously only further limited a specific step/module, a further motivation/suggestion to combine was unnecessary as it had already been successfully combined in the independent claim 1.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KATRINA FUJITA whose telephone number is (571)270-1574. The examiner can normally be reached on M-Th 8-5:30pm, F 8-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on (571) 272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Katrina Fujita/
Examiner, Art Unit 2624